Circular No. 56A

THE ASHTON

Improved Standard Locomotive

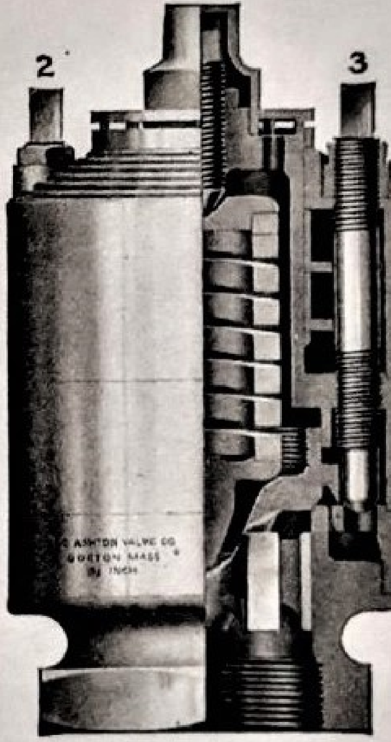
MUFFLED Pop Safety Valves AND OPEN

A MUFFLED VALVE IN EFFECT — NOT IN NAME ONLY

EVER since the introduction of the first Ashton Patented Muffled Valve there has been a steady and ever-increasing interest among railroads in the adoption of this style valve, until now it is by far the greatest in demand. The quiet yet efficient relief given by the Muffler in contrast with the noisy Open Pop Valve is universally appreciated, and many railroads have adopted Muffled Valves for the working valves on their engines. Ashton Improved Muffled Valves are unequalled for efficiency and durability, showing lowest cost for repairs.

GENERAL DESCRIPTION

The mechanical principles upon which our valves are constructed, and the philosophy embodied in their proportions, make them the most perfect and efficient safety valves of which we have any knowledge. When of proper size, these valves give instant and perfect relief to the boiler, and it is impossible to accumulate pressure above the point at which they are set. They are sensitive in action, and always reliable. At the set pressure the wing valve will rise, and will not stop blowing until relief is given, with nothing to be disarranged or get out of order. They have now been on the market for more than half a century, during which time they have met with unusual success, and held an unequalled reputation. It has always been the policy of the company to make its product in quality of material and workmanship the best possibly attainable in the state of the art. The result is that Ashton goods are recognized as being the most reliable and durable.



No. 30 M.M. 3 and 3½ inch
No. 30 M.M.B. 2½ and 4 inch

The only safety valves having a practical and efficient top outside adjustment for regulating the pop; saves time and expense, increases efficiency and durability. They also have an encased spring and the well-known knife edge pop lip which wears evenly with the seat, giving a constant pop or blowdown, controlled by regulators 2 and 3.

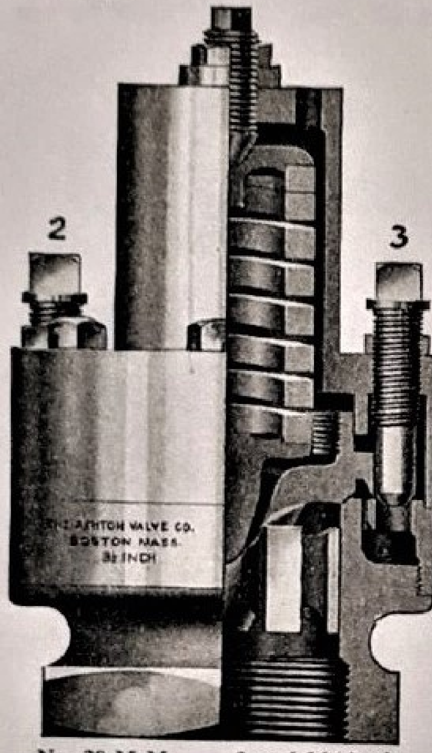
THE ASHTON VALVE COMPANY
161-179 FIRST STREET, CAMBRIDGE (BOSTON), MASS.
Chicago, Illinois New York, N. Y. San Francisco, Cal.

Printed in U.S.A

ASHTON

Master Mechanics Standard Open Pop Safety Valves

THE Numbers 30 M.M., 30 M.M.B., 28 M.M. and 28 M.M.B. Valves are constructed strictly in accordance with the recommended practice of the Committee on Safety Valves of the American Railway Master Mechanics Association, 1912: Hexagon of standard wrench size; Standard pipe thread connections same size as valves; .10-inch valve lift, stamped upon valve; and 46° seats.



No. 28 M.M. 3 and 3½ inch
No. 28 M.M.B. 2½ and 4 inch

In designing these valves we have followed the construction of the well known No. 28 and No. 30 Ashton Valves, so offer the railroads no experiment, and can without hesitation recommend them to our patrons. The wing valves, springs, spring discs, pressure screws, and lock nuts, interchange in the several sizes between the open pop and muffler, thus reducing the number of spare parts required in store department.

Springs: The durability and efficiency of a safety valve are largely dependent upon the spring. We positively guarantee our springs for five years when used at the pressure for which they are designed.

We invite your attention to a comparison of the weights of our valves with other makes; also to the thickness of metal under the seats and through the wing valves, points subject to wear in service.

We will be pleased to furnish, upon application, a form showing the number and size valves we recommend for locomotive boilers of various sizes and pressures, and to send a trial set of these valves of the size recommended, which we will guarantee to relieve the boiler, require less attention, and stay out of the shops longer than any other safety valve on the American market.

For directions in setting the valves and regulating pop or blowdown, see page four.

DIMENSIONS IN INCHES

Style of Valve	30 M.M.	30 M.M.B.	30 M.M.	30 M.M.	30 M.M.	30 M.M.B.	28 M.M.	28 M.M.B.	28 M.M.	28 M.M.	28 M.M.	28 M.M.B.
Size of Valve	2½	2½	3	3½	4	4	2½	2½	3	3½	4	4
Diameter of Valve	5½	5½	6	6⅜	7⅝	7⅝	5½	5½	6	6⅜	7⅝	7⅝
Height of Valve	11	11	12	12¼	13	13	10½	10½	11½	11⅝	12½	12½
Spring, Inside Diam.	1½	1½	1¾	1¾	2	2¼	1½	1½	1¾	1¾	2	2¼
Spring, Length	3⅝	3⅝	4¼	4½	5	5	3⅝	3⅝	4¼	4½	5	5
Inlet, Pipe Tap	2½	2½	3	3½	4	4	2½	2½	3	3½	4	4

PRICES ON APPLICATION

ASHTON
Increased Lift Muffler Safety Valves

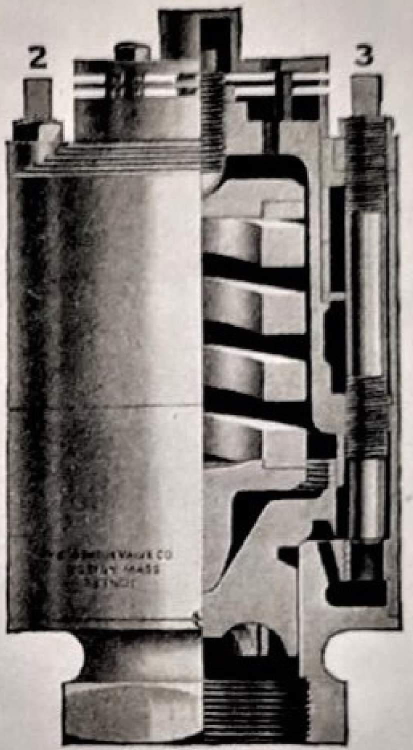
THE ASHTON INCREASED LIFT SAFETY VALVES were designed by this Company to meet a condition confronting the mechanical departments of railroads caused by the increase in size of locomotive boilers, and the objection to increasing the size or number of safety valves of moderate lift.

In the design and construction of these valves we have given due consideration to the exacting conditions imposed by this increased capacity, and with a liberal distribution of metal, our many years' experience to guide us, and by following closely the design of the No. 28 and No. 30 ASHTON VALVES we have produced and thoroughly tested in service, valves equal in capacity to any on the market. We invite a comparison to prove that they will run longer without adjustment or repairs.

Wing Valves, springs, etc., interchange in the Muffler and Open Pop.

The Increased Lift Valves, unless otherwise specified, are furnished with Standard Pipe Thread Connection same size as valve.

To our conservative methods we largely owe our success. We make our own experiments and thoroughly test our valves before offering them to the railroads.



No. 30 I.L.
No. 30 I.L.A. 3 inch

Form showing number and size valves we recommend for locomotive boilers furnished upon application. When ordering safety valves always give size, style, pressure and connection desired.

DIMENSIONS IN INCHES

Style of Valve	30 I.L.	30 I.L.	30 I.L.A.	30 I.L.	30 I.L.
Size of Valve	2½	3	3	3½	4
Diameter of Valve	6	6½	6 11/16	7⅛	8⅜
Height of Valve	11 3/16	12⅝	12⅝	13½	14
Spring, Inside Diameter	1¾	2	2¼	2¼	2¼
Spring, Length	4½	5	5	5½	5½
Inlet, Pipe Tap	2½	3	3	3½	4

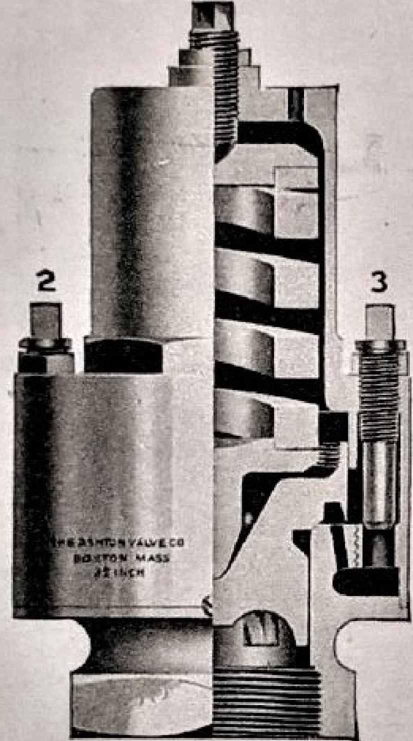
Spring dimensions apply to Nos. 28 I.L. and 28 I.L.A., also.

PRICES ON APPLICATION

ASHTON
Increased Lift Open Pop Safety Valves

"A RECORD IN SAFETY VALVE ECONOMY"

On three large railroads using Ashton Safety Valves exclusively, the total cost of valves and parts purchased for renewals averaged 23 cents per valve per year. These roads have approximately 4,000 Ashton Safety Valves, some of which have been in service over thirty years.



No. 28 I.L.
No. 28 I.L.A. 3 inch

Special Notice: We will send one or more of our different styles of Locomotive valves on trial, subject to approval only if satisfactory after actual service test. The valves are usually made with standard pipe-thread connections the same size as the valve, but the I.L. and I.L.A. valves will be made without extra charge with special threads to fit any size dome connections, thus enabling a railroad to keep its present standard.

One of the most essential features in safety valve construction is the means provided for pop regulation with its reliability to control the blowdown, and accessibility to the men making the adjustments. The Ashton method requires no special wrenches, no rings or sleeves that are invariably corroded and cannot be moved. No outside casing to move that may be damaged by wrenches in removing or applying the valves. No danger to the workman. Read the following:

DIRECTIONS

To change "pop," or blowdown, slack check nut on one or both of the pop regulators 2 and 3, and screw down for increased "pop" or up for less "pop."

Never change set pressure of a safety valve until gage has been tested and found correct.

To change set pressure, remove cap if any, slack check nut, turn pressure screw down for higher or up for lower pressure, set up check nut. For pressures 215 pounds or less, no change should be made exceeding 15 pounds above or below that stamped on the spring. For higher pressures, 20 pounds variation is allowable. When variation exceeds above limits, new springs should be ordered.

DIMENSIONS IN INCHES

Style of Valve	28 I.L.	28 I.L.	28 I.L.A.	28 I.L.	28 I.L.
Size of Valve	2½	3	3	3½	4
Diameter of Valve	6	6½	6 11/16	7⅛	8⅝
Height of Valve	11⅝	12½	12½	13⅛	13⅜
Inlet, Pipe Tap	2½	3	3	3½	4

We are prepared to furnish valves of smaller diameter and height if desired.

PRICES ON APPLICATION